Amendments to the Claims:

This listing of claims replaces all prior version and listing of claims in this application.

1. (Currently Amended) A process for controlling accumulation of catalyst solids in ~~the~~ a recovery train of ~~the~~ an oxygenate to olefin process comprising:

providing an effluent stream from an oxygenate to olefin reaction, wherein the effluent stream comprises solid particles and a gas phase containing prime olefins and having a dew point;

removing heat from the effluent stream while maintaining ~~a temperature of~~ the effluent stream ~~gas phase~~ above the dew point of the gas phase~~during the step of removing heat~~; and

washing the effluent stream ~~in a solids wash~~ at a temperature below the dew point of the gas phase to remove the solid particles from effluent stream into a wash medium.

2. (Original) The process of claim 1, wherein the effluent stream comprises prime olefins in an amount of about 40wt% or more of the effluent stream excluding water and solid particles.

3. (Original) The process of claim 1, wherein the effluent stream comprises prime olefins in an amount of about 60wt% or more of the effluent stream excluding water and solid particles.

4. (Original) The process of claim 1, wherein the effluent stream comprises ethylene in an amount of about 20wt% or more of the effluent stream excluding water and solid particles.

5. (Original) The process of claim 1, wherein the effluent stream comprises ethylene in an amount ranging from about 20wt% to about 70wt% of the effluent stream excluding water and solid particles.

6. (Original) The process of claim 1, wherein the effluent stream comprises propylene in an amount of about 20wt% or more of the effluent stream excluding water and solid particles.

7. (Original) The process of claim 1, wherein the effluent stream comprises propylene in an amount ranging from about 20wt% to about 70wt% of the effluent stream excluding water and solid particles.

8. (Original) The process of claim 1, wherein the effluent stream comprises water in an amount of 25wt% or more of the effluent stream.

9. (Original) The process of claim 1, wherein the effluent stream comprises water in an amount ranging from about 40wt% to about 80wt% of the effluent stream.

10. (Original) The process of claim 1, wherein the effluent stream comprises water in an amount ranging from about 50wt% to about 65wt% of the effluent stream.

11. (Original) The process of claim 1, wherein the effluent stream comprises oxygenated hydrocarbons in an amount ranging from about 0.2wt% to about 30wt% of the effluent stream excluding water and solid particles.

12. (Original) The process of claim 1, wherein the effluent stream comprises solid particles in an amount of about 0.15wt% or less of the effluent stream.

13. (Original) The process of claim 1, wherein the effluent stream comprises solid particles in an amount of about 0.010wt% or less of the effluent stream.

14. (Original) The process of claim 1, wherein the effluent stream comprises catalyst particles in an amount ranging from about 0.001wt% to about 0.15wt%of the effluent stream.

15. (Original) The process of claim 1, wherein the effluent stream comprises catalyst particles in an amount ranging from about 0.003wt% to about 0.10wt% of the effluent stream.

16. (Original) The process of claim 1, wherein the effluent stream comprises catalyst particles in an amount ranging from about 0.005wt% to about 0.05wt% of the effluent stream.

17. (Original) The process of claim 1, wherein the effluent stream has an effluent temperature of about 200°C or more.

18. (Original) The process of claim 1, wherein the effluent stream has an effluent temperature ranging from about 200°C to about 700°C.

19. (Original) The process of claim 1, wherein the effluent stream has an effluent temperature ranging from about 300°C to about 600°C.

20. (Original) The process of claim 1, wherein the effluent stream has an effluent temperature ranging from 350°C to about 550°C.

21. (Original) The process of claim 1 wherein the effluent stream comprises water and hydrocarbons and has an aqueous dew point and a non-aqueous dew point, the aqueous dew point being higher than the non-aqueous dew point.

22. (Original) The process for claim 1, wherein the step of removing heat comprises removing heat with one or more heat exchanger.

23. (Original) The process of claim 22, wherein the temperature of the effluent stream is maintained at a temperature of about 3°C above the dew point prior to the step of washing.

24. (Original) The process of claim 22, wherein the temperature of the effluent stream is maintained at a temperature of about 5.5°C above the dew point prior to the step of washing.

25. (Original) The process of claim 22, wherein the temperature of the effluent stream is maintained at a temperature of about 10°C above the dew point prior to the step of washing.

26. (Original) The process of claim 22, wherein the oxygenate to olefins reaction occurs in a reactor, the reactor being in fluid communication with the one or more heat exchangers and the solids wash by a conduit.

27. (Original) The process of claim 22, wherein the step of providing an effluent stream further comprises:

providing a feed stream to the oxygenate to olefin reactor, wherein the feed stream is used as a cooling fluid in the heat exchanger.

28. (Original) The process for claim 27, wherein the cooling fluid is boiled within the heat exchanger.

29. (Original) The process of claim 1, wherein the wash medium is water.

30. (Original) The process of claim 1, wherein the solids wash is a quench tower.

31. (Currently Amended) A process for producing olefins, the process comprising the steps of:

providing an oxygenate feed stream;

reacting the oxygenate feed stream in the presence of a catalyst to produce an effluent stream, wherein the effluent stream has a dew point and comprises an olefin containing gas phase and catalyst solids;

removing heat from the effluent stream while maintaining the temperature of the effluent stream above the dew point of the gas phase; and

contacting the effluent stream with a liquid at a temperature below the dew point of the gas phase; and ~~to separate~~

separating the catalyst solids from the olefin containing gas phase.

32. (Original) The process of claim 31, wherein the oxygenate feed stream contains methanol.

33. (Original) The process of claim 32, wherein the catalyst is a molecular sieve catalyst.

34. (Original) The process of claim 33, wherein the molecular sieve catalyst comprises a silicoaluminophosphate molecular sieve selected from SAPO-5, SAPO-8, SAPO-11, SAPO-16, SAPO-17, SAPO-18, SAPO-20, SAPO-31, SAPO-34, SAPO-35, SAPO-36, SAPO-37, SAPO-40, SAPO-41, SAPO-42, SAPO-44, SAPO-47, SAPO-56, the metal containing forms thereof, or mixtures thereof.

35. (Original) The process of claim 31, wherein the step of contacting occurs in a quench tower.

36. (Original) The process of claim 31, wherein the step of removing heat is accomplished using a heat exchanger.

37. (Original) The process of claim 36, wherein the oxygenate feed stream is used as a cooling fluid in the heat exchanger.

38. (Original) The process of claim 37, wherein the oxygenate feed is boiled in the step of removing heat.

39. (Original) The process of claim 31, wherein the step of reacting occurs at a temperature ranging from about 200°C to about 700°C and an oxygenate partial pressure of about 1 psia or more.

40. (Original) The process for claim 31, wherein the step of reacting occurs at a temperature ranging from about 350°C to about 550°C and an oxygenate partial pressure of about 1 psia or more.

41. (Original) The process for claim 31, wherein the step of reacting occurs at a temperature ranging from about 200°C to about 700°C and an oxygenate partial pressure of greater than or equal to 20 psia.

42. (Original) The process for claim 31, wherein the step of reacting occurs at a temperature ranging from about 300°C to about 600°C and an oxygenate partial pressure of greater than or equal to about 20 psia.

43. (Original) The process for claim 31, wherein the step of reacting occurs at a temperature ranging from about 350°C to about 550°C and an oxygenate partial pressure of greater than or equal to about 20 psia.

44. (Currently Amended) A process for producing olefins, the process comprising the steps of:

providing an oxygenate feed stream;

reacting the oxygenate feed stream in the presence of a catalyst to produce ~~an effluent~~ a product stream containg catalyst and olefin;

separating catalyst from the ~~effluent~~ product stream in a cyclone separator to produce an effluent stream ~~having a temperature and~~ comprising an olefin containing gas phase and catalyst fines;

removing heat from the ~~reactor~~ effluent stream ~~wherein the~~ at a temperature that remains above the dew point of the effluent stream ~~during the step of removing heat~~ to provide a cooled effluent stream; and

washing catalyst fines from the cooled effluent stream in a ~~solids~~ wash to remove the catalyst fines ~~solids~~ from the olefin containing gas phase.